INSTALLATION & OPERATION MANUAL

V SERIES FOOD HOLDING & TRANSPORTATION CABINETS AND BANQUET CARTS

MODELS:

VB90	ML-126548
VB96	ML-126550
VB150	ML-126552
VBP5I	ML-138030
VBP7I	ML-126358
VBP13I	ML-126359
VBP15I	ML-126360
VBP33	ML-138075
VBP77I	ML-126361
VBS15	ML-138033
VHA9	ML-138072
VHA18	ML-138073
VHDP5	ML-138035
VHFA9	ML-138070
VHFA18	ML-138071
VHP3	ML-126343
VHP7	ML-126344
VHP8	ML-126345
VHP15	ML-126346
VHP20	ML-126347

For additional information on Vulcan-Hart or to locate an authorized parts and service provider in your area, visit our website at www.vulcanequipment.com

VULCAN
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IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL ELECTRICAL EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITYOF THIS OR ANY OTHER APPLIANCE.

⚠ WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death.

Read the installation, operating and maintenance instructions thoroughly before installing or servicing equipment.

IN THE EVENT OF A POWER FAILURE,

DO NOT ATTEMPT TO OPERATE THIS DEVICE

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GENERAL

INTRODUCTION

Vulcan-Hart Holding & Transport Cabinets and Banquet Carts are produced with quality workmanship and material. Proper installation, usage, and maintenance of your cabinet will result in many years of satisfactory performance.

It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

The V Series Holding & Transport Cabinets and Banquet Carts provide an efficient means of transporting and holding bulk prepared foods at proper serving temperatures.

INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the rating plate located on the lower back corner of the cabinet. If the supply and equipment requirements do not agree, do not proceed with unpacking and installation. Contact your Vulcan-Hart Customer Service Department immediately.

UNPACKING:

The Cabinet was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment. Immediately after unpacking, check for possible shipping damage to the cabinet.

If the cabinet is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Carefully unpack and place in a work accessible area as near the installation position as possible.

1. Open the door and carefully remove any packaging materials and the retaining straps that hold the wire plate racks (Banquet Carts) or the tray slides and tray slide upright side supports (Holding & Transport Cabinets).

2. Peel off vinyl protection film.

3. On Banquet Carts, lift the plate racks into position on the side brackets.

4. On Holding & Transport Cabinets, remove cardboard element cover protector from cabinet bottom.

   Remove adjustable tray slides from box.

   Remove the tray slide supports and install them in the cabinet.

   a. Hook the openings in the flat flange of the support over two vertical carriage bolts on the interior of the cabinet.
   b. Make sure all flanges on the four supports face the door opening.

5. Install tray slides in the cabinet. Make sure the hook on the end of the tray slide is up. (*Fig. 1)*

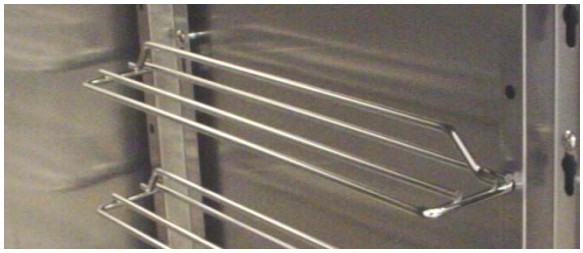


Fig. 1

CLEANING:

The cabinet should be thoroughly cleaned prior to putting into service.

Use a mild soap and water solution to clean the interior of the unit. Never use harsh chemicals or abrasive pads to clean the unit.

LOCATION:

For efficient cabinet operation, choose a location that will provide easy loading and unloading without interfering with the final assembly of food orders.

The installation location must allow adequate clearances for servicing and proper operation. *(Fig.2)*

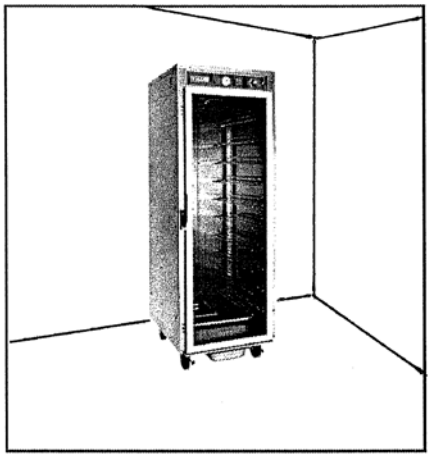


Fig. 2

ELECTRICAL REQUIREMENTS

ELECTRICAL CODES & STANDARDS:

The cabinet must be installed in accordance with:

In the United States of America:

1. State and Local Codes.
2. National Electrical Code, ANSI/ NFPA-70 (latest edition.) Copies may be obtained from: The National Fire Protection Association, 1Batterymarch Park, Quincy, MA 02269. 1-617-770-3000 www.nfpa.org

In Canada:

1. Local Codes.
2. Canadian Electrical Code, CSA C22.1 (latest edition.) Copies may be obtained from: The Canadian Standard Association. www.csa.ca

ELECTRICAL CONNECTIONS:

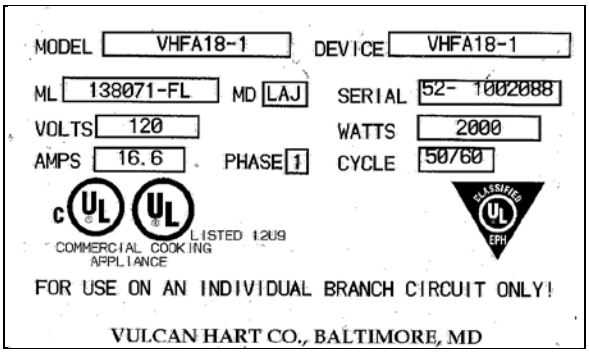
The cabinet is factory wired for either 110/120 volt or 208/240 volt, single phase operation. All 110/120 volt cabinets are equipped with an 8 foot cord and NEMA 5-15 plug as standard equipment. All 208/240 volt cabinets are equipped with a 8 foot cord and NEMA 6-15 plug. Refer to wiring diagrams in the back of this manual.

The cord and plug supplied is a suitable durable cord with a molded three-prong plug, and is provided with a proper strain relief.

⚠WARNING **All cabinets are equipped with a three-prong plug. It is imperative that this plug must be connected into a properly grounded three-prong receptacle. If the receptacle is not the proper**

grounding type, contact an electrician. *Do not remove the grounding prong from this plug.*

Verify that the power source matches the Serial Data Plate located on the lower back corner of the cabinet and the plug configuration before the connection is made. (Fig. *3)*

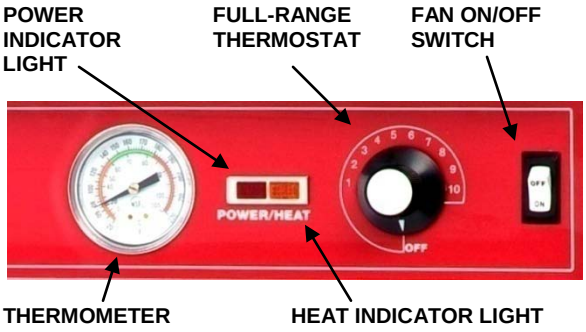


(Fig. 3)

OPERATION

CONTROLS

⚠WARNING The Cabinet and its parts are hot. Be very careful when operating, cleaning, or servicing the cabinet.



(Fig. 4)

Power Indicator Light:
The Red Power Indicator Light indicates power is supplied to the cabinet. The red light will stay lit as long as the cabinet is plugged in.

Heat Indicator Light:
The Amber Heat Indicator Light indicates the heating element(s) are heating. The amber light will stay lit as long as the heating element(s) are engaged. Once the predetermined temperature is achieved, the heating element(s) will begin to cycle. During this period, the amber light will turn on and off.

Fan On/Off Switch:
The Fan On/Off Switch turns the fan on only. The use of the fan is optional. Turn on fan if forced air holding is desired.

Thermometer:
The Thermometer indicates the interior temperature of the cabinet.

Thermostat:
The Thermostat turns power on to the heating element(s). The thermostat setting is from 1 to 10. The greater the thermostat setting number, the higher the temperature. (*Fig. 5)*

Thermostat Setting	Approximate Temperature
1	100°F (37°C)
2	110°F (43°C)
3	120°F (49°C)
4	130°F (54°C)
5	140°F (60°C)
6	150°F (66°C)
7	160°F (71°C)
8	170°F (77°C)
9	180°F (82°C)
10	190°F (88°C)

(Fig. 5)

It is recommended that prior to placing the cabinet in operation, that it be preheated at the highest temperature setting for a period of 30 to 45 minutes.

HOLDING OPERATING INSTRUCTIONS

Once the cabinet has been connected to the appropriate power source, the cabinet is ready for operation.

1. Begin by turning the thermostat dial to the number **5**. This will cause the heating element(s) to start heating. Once the red light is lit, the thermostat dial can be turned to the desired setting.
2. Switch the Fan switch to On if forced air holding is desired. The use of the fan is optional. Use of the fan keeps the temperature even throughout the cabinet.
3. Wait approximately 25 minutes for the cabinet to preheat.
4. Load Hot food pans with hot, cooked food into cabinet.

This cabinet is not intended to reheat or cook food. Food must be cooked and at a safe serving temperature prior to being placed in the cabinet

The operator should always monitor the food product to insure that it remains at a proper temperature.

HOLDING SHUTDOWN

When the use of the holding cabinet is completed:

⚠WARNING The Cabinet and its parts are *HOT*. Be very careful when operating, cleaning, or servicing the cabinet.

1. Turn the thermostat to the Off position.
2. Keep the fan switch in the On position. This helps remove the excess humidity from the food product.
3. Allow cabinet to cool down completely.
4. Unplug power cord.
5. Clean cabinet according to instructions in this manual.

CLEANING

⚠WARNING Always *unplug electrical power supply* before cleaning.

DAILY:

1. Unplug electrical power supply.
2. Allow warmer to cool before cleaning.
3. Clean the interior of the cabinet with a mild soap and water. *Never use harsh chemicals or abrasive pads to clean the cabinet.*
4. Rinse and dry with a soft dry cloth.
5. Clean the exterior of the cabinet with a clean damp cloth.

HEAVY-DUTY CLEANING:
For heavy-duty cleaning, use warm water, a degreaser, and a plastic, stainless steel, or Scotch-Brite pad. Never rub in a circular motion -- rub gently in the direction of the steel grain. Always rinse thoroughly.

STAINLESS STEEL CARE

CLEANING:
Stainless Steel contains 70 – 80% iron, which will rust if not properly maintained. Stainless Steel also contains 12 – 30% chromium, which forms an invisible passive, protective film that shields against corrosion.

If the protective film remains intact, the stainless steel will remain intact. However, if the film is damaged, the stainless steel can break down and rust.

PREVENTIVE CARE:
To prevent stainless steel break-down, follow these steps:

1. **Never use any metal tools, scrapers, files, wire brushes, or scouring pads** *(except for stainless steel scouring pads,)* which will mar the surface.
2. **Never use steel wool** – which will leave behind particles that will rust.
3. **Never use acid-based or chloride containing cleaning solutions** – which will break down the protective film.
4. **Never rub in a circular motion**. Always rub gently in the direction of the steel grain.
5. **Never leave any food products or salt on the surface.** Many foods are acidic. Salt contains chloride.

PRESERVING & RESTORING:
Special stainless steel polishing cleaners can preserve and restore the protective film.

Preserve the life of stainless steel with a regular application of a high-quality stainless steel polishing cleaner, as a final step to daily cleaning.

If signs of breakdown appear, restore the stainless steel surface. First, thoroughly clean, rinse, and dry the surface. Then, on a daily basis, apply a high-quality stainless steel polish according to manufacturer's instructions.

HEAT TINT:

Darkened areas, called "heat tint," may appear on stainless steel exposed to excessive heat. Excessive heat causes the protective film to thicken. This is unsightly, but is not a sign of permanent damage.

To remove heat tint, follow the routine cleaning procedure. Stubborn heat tint will require heavy-duty cleaning.

To reduce heat tint, limit the exposure of equipment to excessive heat.

MAINTENANCE

⚠WARNING The Cabinet and its parts are *Hot*. Be very careful when operating, cleaning, or servicing the cabinet.

Always unplug electrical power supply before servicing the cabinet.

For Service, contact the Vulcan-Hart offices listed in this manual.

TROUBLESHOOTING

SYMPTOMS	POSSIBLE CAUSES	REMEDY
Cabinet not operating	Cabinet not connected to power source.	Connect cabinet to power source.
	No power.	Check circuit breaker
		Check GFCI
GFCI or Ground Fault Circuit Indicator tripped	Moisture problem.	Dry moisture problem.
	Shorted element	Contact Authorized Service Provider.
	Pinched/damaged wire.	Contact Authorized Service Provider.
	Damaged power cord.	Contact Authorized Service Provider.
Cabinet is connected to power source, switch is ON, circuit breaker is ON, but cabinet is not heating.	Defective: element, thermometer, thermostat, etc.	Contact Authorized Service Provider.
Power/Heat Indicator Light not lit.	Light faulty	Contact Authorized Service Provider.
Cabinet does not heat properly	Door not shut properly or needs adjustment	Check door seal and Contact Authorized Service Provider.
	Defective: element, thermometer, thermostat, thermostat requires adjustment	Contact Authorized Service Provider.
Fan not operating	ON/OFF switch not ON	Turn ON/OFF switch ON
	Defective fan.	Contact Authorized Service Provider.

SERVICE & PARTS INFORMATION

To obtain Service and Parts information concerning this model, contact the Vulcan Service Department at the address listed on the front cover of this manual or refer to our website: www.vulcanequipment.com for a complete listing of Authorized Service and Parts depots.

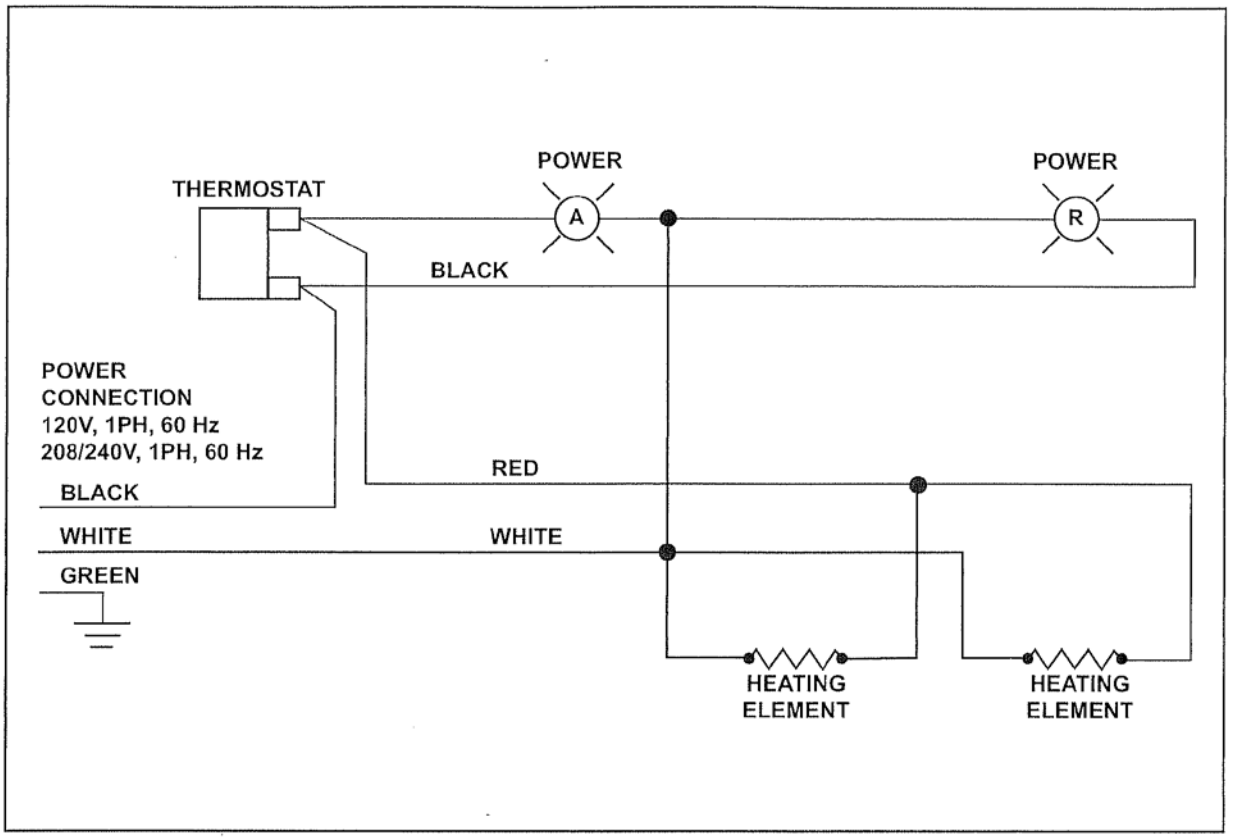
Customer Service **1-800-814-2028**
Technical Service **1-800-814-2028**
Service Parts **1-800-814-2028**

When calling for service, have the model number and serial number available.

SPECIFICATIONS							
MODEL NO.	HEIGHT IN * (mm)	WIDTH IN (mm)	DEPTH IN (mm)	SHIPPING WT. Lb. (kg)	VOLTS	WATTS	AMPS
VB90	71.75" (1822)	31.75" (806)	42.75" (1086)	242# (110 kg)	120	2000	16.6
VB96	62" (1575)	51.5" (1308)	29" (737)	435# (197 kg)	120	2000	16.6
VB150	73" (1854)	61.25" (1556)	29" (737)	590# (268 kg)	120	2000	16.6
VBP5I	33.25" (845)	26.5" (673)	33.75" (857)	173# (79 kg)	120	1000	8.3
VBP7I	39.75" (1010)	26.5" (673)	33.75" (857)	198# (90 kg)	120	1000	8.3
VBP13I	60.25" (1531)	26.5" (673)	33.75" (857)	270# (123 kg)	120	1200	10
VBP15I	66" (1677)	26.5" (673)	33.75" (857)	297# (135 kg)	120	1200	10
VBP33	43.5" (1105)	25.25" (643)	30.75" (782)		120	1200	10
VBP77I	72.5" (1842)	24.5" (622)	31.75" (806)	400# (182 kg)	120	2000	16.6
VBS7	37.625" (956)	23.75" (584)	30.25" (781)	195# (90 kg)	120	1200	10
VBS15	66" (1676)	23.75" (584)	30.25" (781)	315# (144 kg)	120	1200	10
VHA9	43.5" (1105)	25.25" (643)	30.75" (782)		NA	NA	NA
VHA18	71" (1804)	25.25" (643)	30.75" (782)		NA	NA	NA
VHDP5	62.25" (1582)	24.75" (629)	38" (966)	370# (169 kg)	120	2000	16.7
VHFA9	43.5" (1105)	25.25" (643)	30.75" (782)	163# (74 kg)	120	1200	10
VHFA18	70.75" (1797)	25.25" (643)	30.75" (782)	220# (100 kg)	120	2000	16.7
VHP3	23.5" (597)	18" (457)	23.75" (604)	80# (36.6 kg)	120	600	5
VHP7	36.75" (934)	21" (534)	26.75" (680)	140# (64 kg)	120	600	5
VHP8	31.5" (800)	18.25" (464)	25" (635)	90# (40.9 kg)	120	600	5
VHP15	60.5" (1537)	21" (534)	26.75" (680)	200# (91 kg)	120	1200	10
VHP20	61" (1549)	39.5" (1003)	29" (737)	264# (120 kg)	120	1200	10

***HEIGHT MEASUREMENT INCLUDES 5" CASTERS** **3-2011**

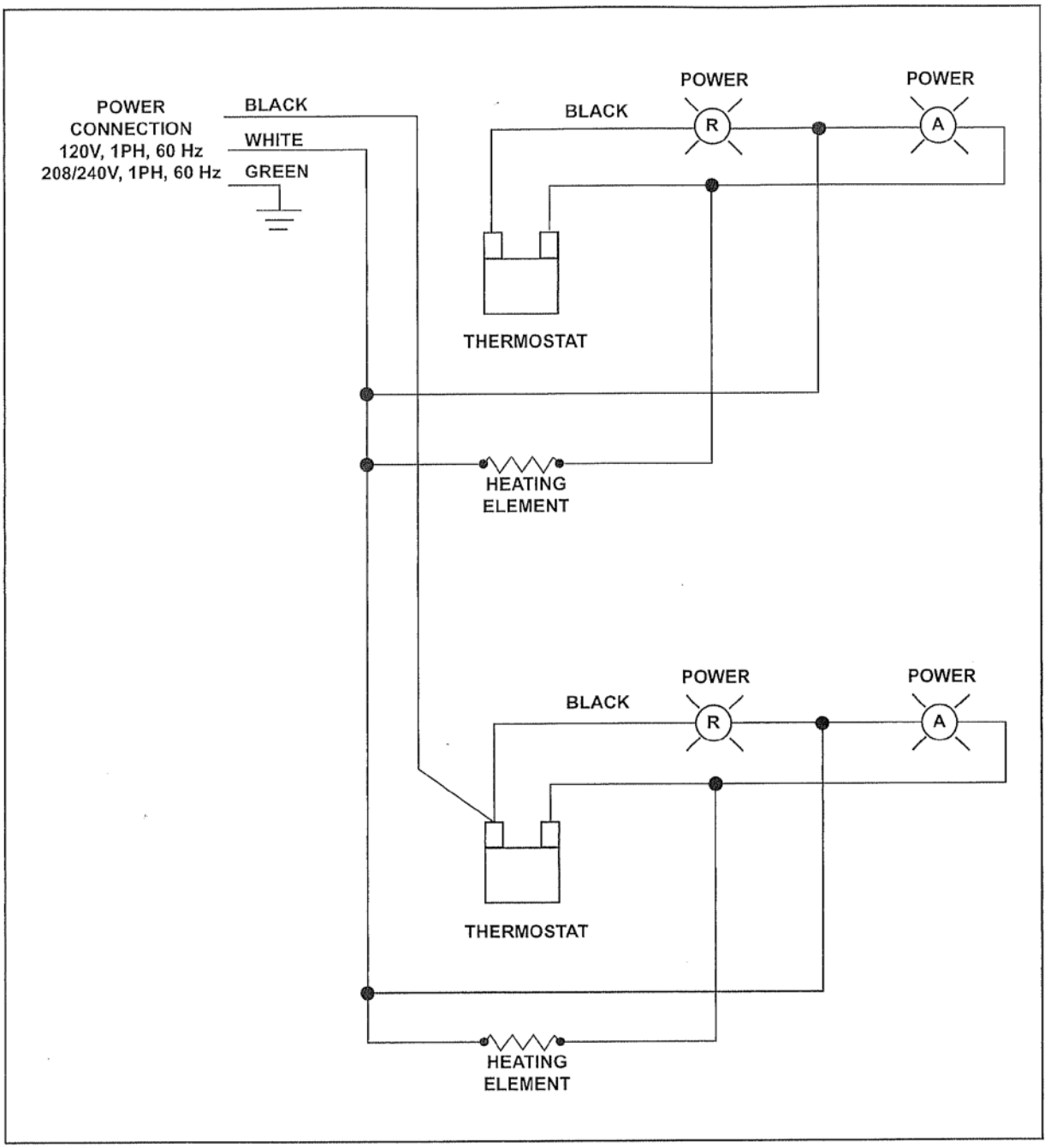
WIRING DIAGRAMS



VB90, VB96, VB150, VBP5I, VBP7I, VBP13I, VBP15I, VHP15, VHP20, VBS7, VBS15
VBP33 Wiring Diagram

MODELS MANUFACTURED BEFORE 01/01/2010

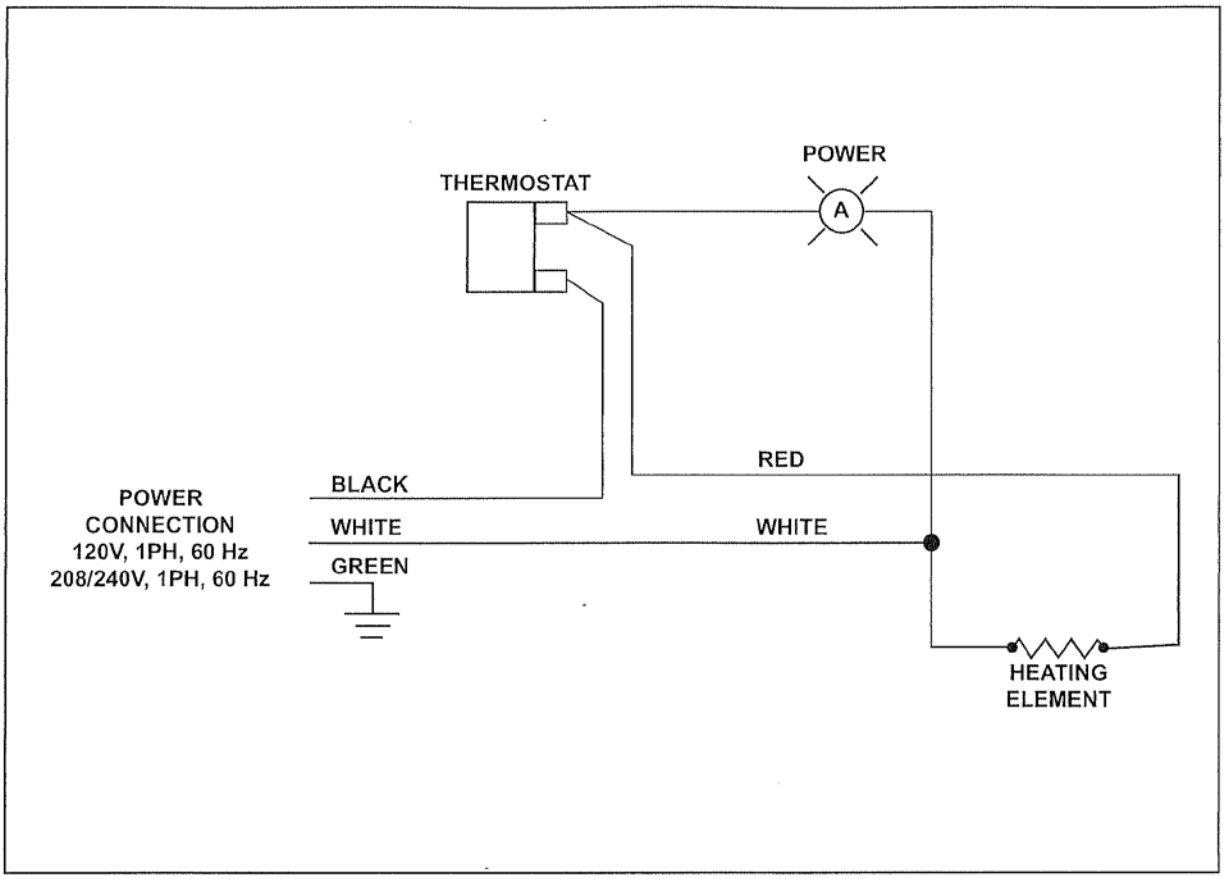
VB90, VB96, VB150, VBP5I, VBP7I, VBP13I, VBP15I, VHP15, VHP20, VBS7, VBS15, VBP33



VBP77I Wiring Diagram

MODEL MANUFACTURED BEFORE 01/01/2010

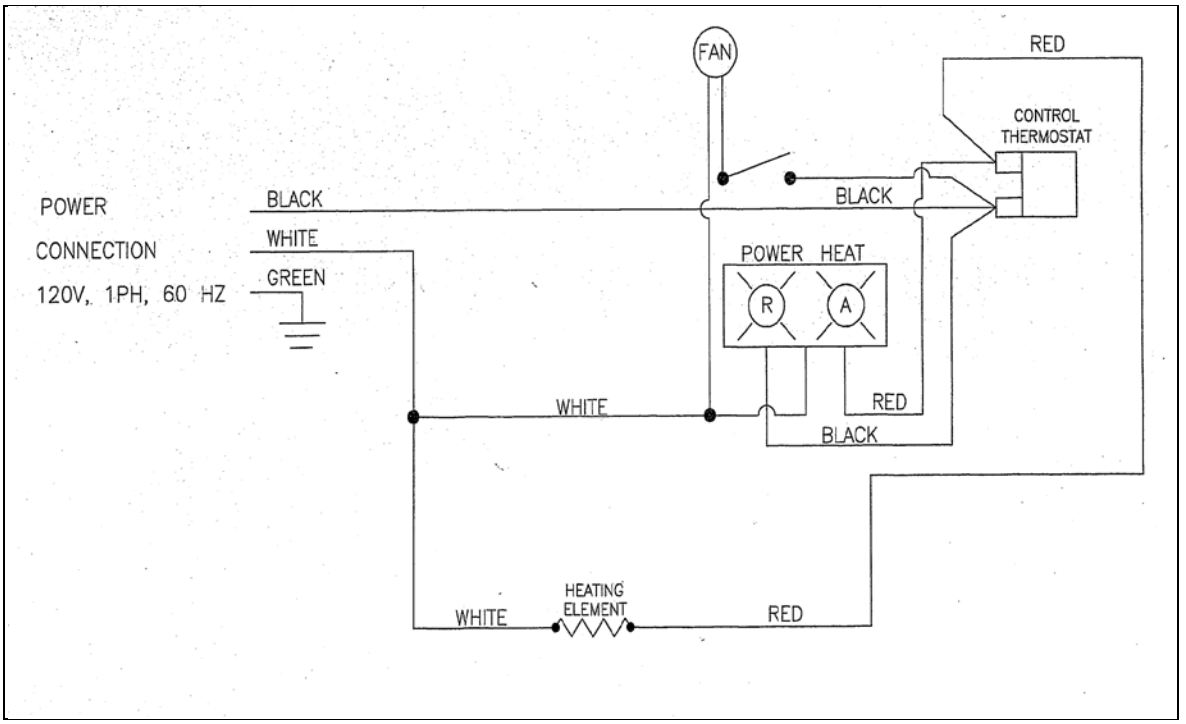
VBP77I



VHP3, VHP7, VHP8 Wiring Diagram

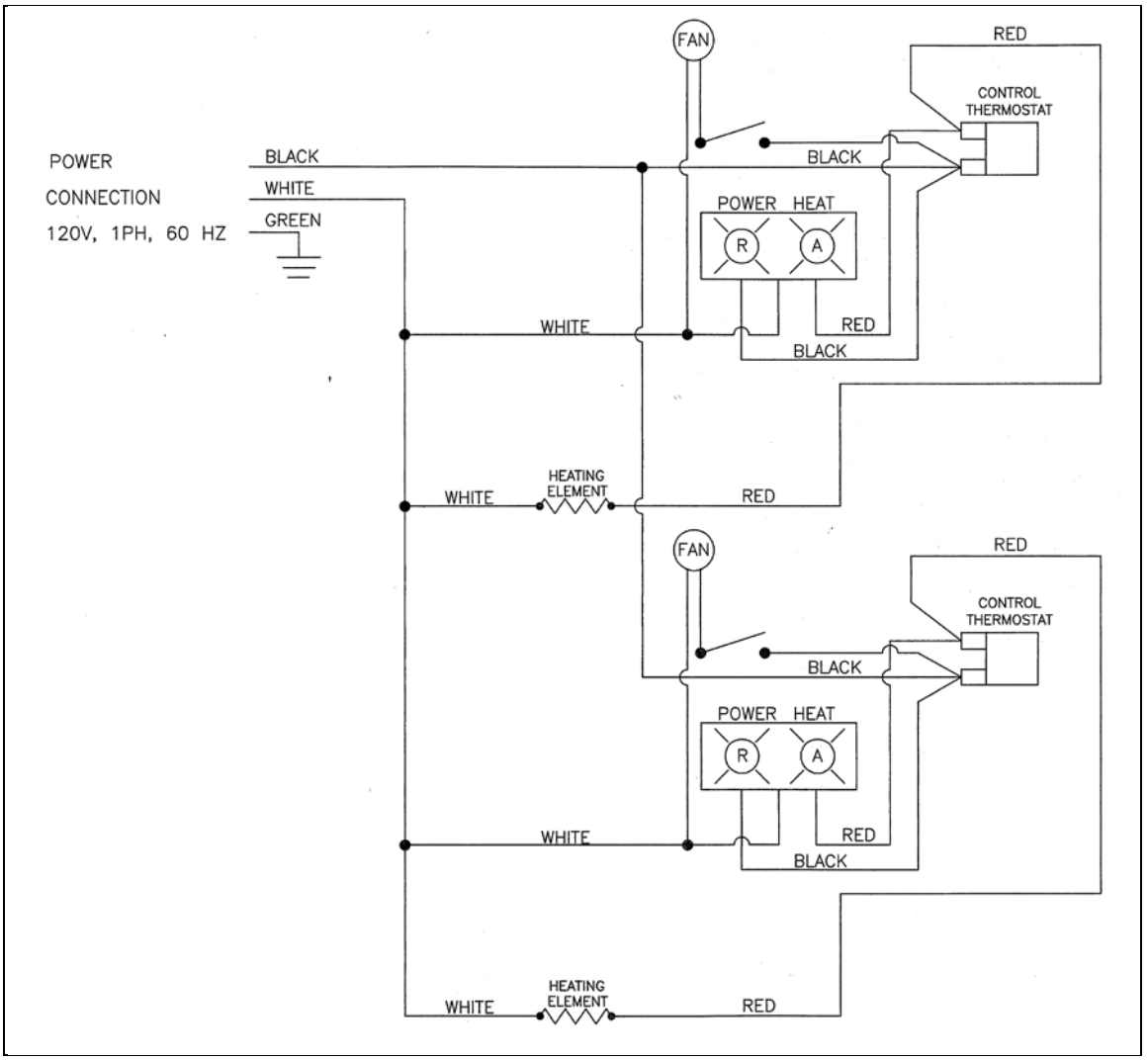
MODELS MANUFACTURED BEFORE 01/01/2010

VHP3, VHP7, VHP8



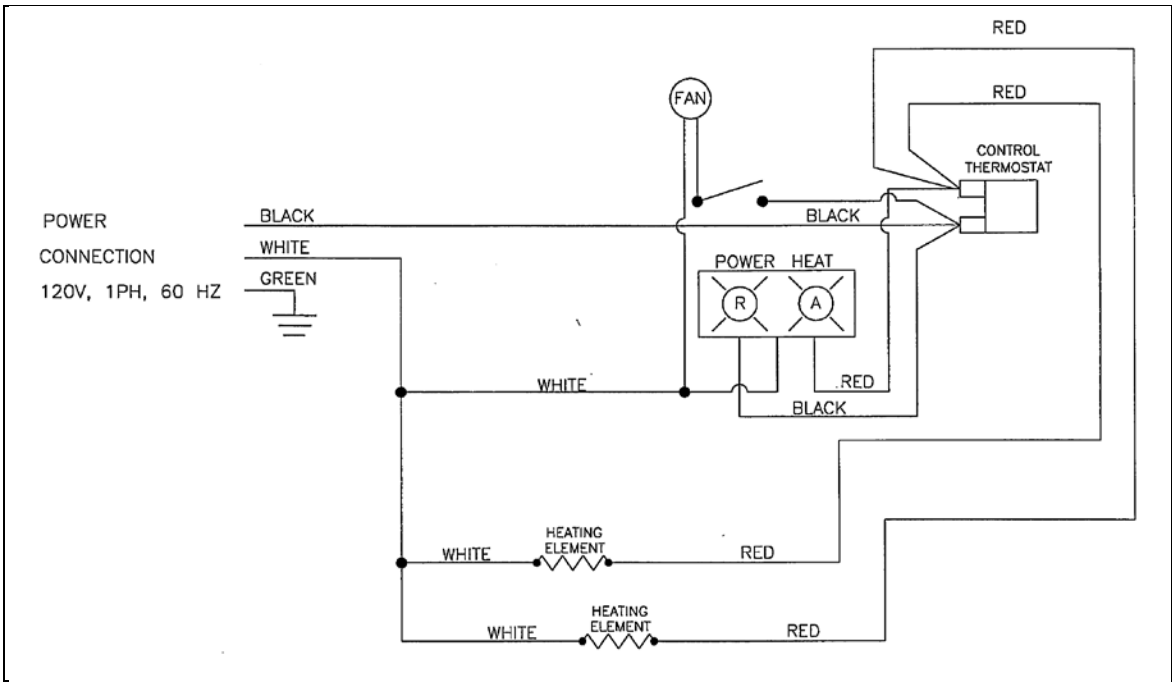
<u>MODELS MANUFACTURED AFTER 01/01/2010</u>

VBP5I, VBP7I, VBP13I, VBP15I, VHP7, VHP15, VBS7, VBS15



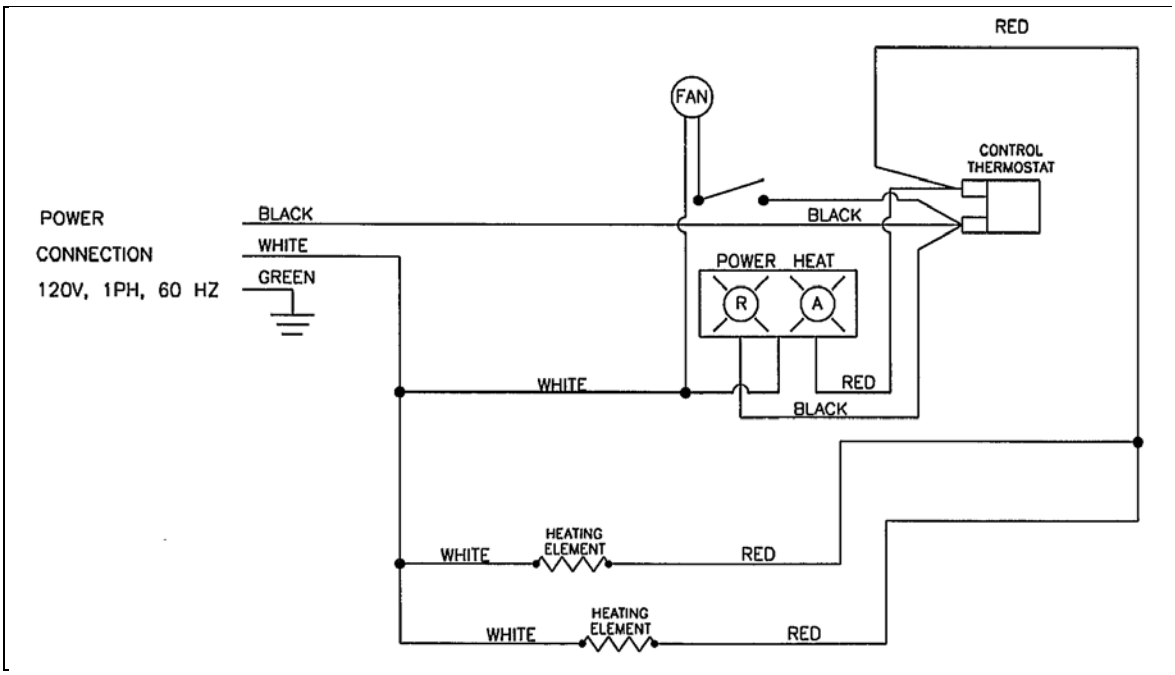
<u>MODEL MANUFACTURED 01/01/2010 through 01/20/2011</u>

VBP77I



MODELS MANUFACTURED AFTER 5/16/11

VHFA9, VHFA18



MODELS MANUFACTURED THROUGH 5/15/11

VHFA9, VHFA18

LIMITED ORIGINAL COMMERCIAL EQUIPMENT WARRANTY

Vulcan (Vulcan) warrants its new product(s) to be free from defects in material and workmanship for a period of one (1) year from the date of original installation.

Wolf Range is affiliated with Vulcan and thus Wolf products carry the same warranty as Vulcan products.

This Warranty is subject to the following conditions and limitations:

1. This warranty is limited to product(s) sold by Vulcan to the original user in the continental United States and Canada.
2. Original installation must occur within 3 years of date of manufacture, and proof of the installation date must be provided to Vulcan. Equipment must be located at the original installation location regardless if same owner.
3. The liability of Vulcan is limited to the repair or replacement of any part found to be defective.
4. Vulcan will bear normal labor charges incurred in the repair or replacement of a warranted piece of equipment within 50 miles (80 kilometers) of an authorized service agency. Time and travel charges in excess of 50 miles (80 kilometers) will be the responsibility of the person or firm requesting the service.
5. This warranty does not apply to any product(s) which have not been installed in accordance with the directions published in the appropriate installation and operation manuals.
6. Vulcan will bear no responsibility or liability for any product(s) which have been mishandled, abused, misapplied, misused, subjected to harsh chemical action or poor water quality, field modified by unauthorized personnel, damaged by flood, fire or other acts of nature, or which have altered or missing serial numbers.
7. Vulcan does not recommend or authorize the use of any product(s) in a non-commercial application, including but not limited to residential use. The use or installation of product(s) in non-commercial applications renders all warranties, express or implied, including the warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, null and void, including any responsibility for damage, costs and legal actions resulting from the use or installation of product(s) in any non-commercial setting.
8. Adjustments such as calibrations, leveling, tightening of fasteners or utility connections normally associated with original installation are the responsibility of the installer and not that of Vulcan.
9. Exceptions to the one year part warranty period are as listed:
10. Fryer equipment is supplied with limited fry tank warranty based on model. (see separate warranty statement) Refrigeration appliance compressors - 5 years limited. Steam equipment supplied with ScaleBlocker® water filtration system. (see separate warranty statement) Pressure steam boilers - 5 years prorated. (boilers not properly maintained will not be considered for prorated warranty) Rubber seals, light bulbs and gaskets - 90 days from installation. Heating elements on drawer warmers, cook & hold ovens, and holding & transport cabinets have a lifetime warranty. Drawer slides in drawer warmers have a lifetime warranty. Labor, travel and mileage will be covered during the first year only.
11. Original purchased replacement parts manufactured by Vulcan will be warranted for 90 days from the parts invoice date. Exceptions are stainless steel fry tanks, refrigeration appliance compressors and pressure steam boilers which will be warranted as stated in item 9. This warranty is for parts cost only, and does not include freight or labor charges.
12. This states the exclusive remedy against Vulcan relating to the product(s), whether in contract or in tort or under any other legal theory, and whether arising out of warranties, representations, instructions, installations or defects from any cause. Vulcan shall not be liable, under any legal theory, for loss of use, revenue or profit, or for substitute use or performance, or for incidental, indirect, or special or consequential damages or for any other loss of cost of similar type.
13. THIS WARRANTY AND THE LIABILITIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OF THEIR LIABILITIES AND WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND CONSTITUTES THE ONLY WARRANTY OF VULCAN WITH RESPECT TO THE PRODUCT(S).

TERMS: Vulcan payment terms are 1% 10 days, net 30 days from date of INVOICE. A cash discount will not apply to shipping charges, C.O.D. payment or sight draft billing. All orders are subject to approval by Vulcan.
PRICES: All prices in: EASTERN ZONE – F.O.B. Baltimore, MD, Covington, KY, Kansas City, MO
WESTERN ZONE – F.O.B. Albuquerque, NM, Salt Lake City, UT
(Call Vulcan for geographic boundaries.)
Prices do not include any municipal, state or sales tax. Options in this list are available only at time of shipment. Accessory items can be ordered at any time from current published equipment price lists, or from any Vulcan Parts Depot. Accessory exceptions are flue risers and convection oven stands. Order as you would standard equipment.
CHECK THAT ORDERS ARE COMPLETE – DO THEY INCLUDE:
1. Type of gas and/or specific electric characteristics (voltage, phase and hertz).
2. Name and address of end-user installation (if known).
3. Position of units that are to be batteried together (left to right facing equipment). A sketch is preferable.
4. Optional equipment and/or accessories.
5. Type of finish.
6. Specify shipping date (month, day & year).
SHIPMENTS: Upon acceptance of the merchandise by the carrier, title passes to the purchaser and the Vulcan equipment travels at the risk of the purchaser.
RETURN POLICY: Vulcan products cannot be returned without prior written factory authorization. The restocking charge is 20% plus any costs to recondition the equipment. No returns accepted after 90 days from date of invoice. Returns for credit must be freight prepaid. Orders cancelled or changed after production has started are subject to a charge of up to 20%. Any special merchandise built to a buyer's specifications will be subject to a 50% minimum cancellation charge.
PRICES SUBJECT TO CHANGE WITHOUT NOTICE.